

ENDANGERED SPECIES ACT SECTION 7 CONSULTATION BIOLOGICAL OPINION

Action Agency: National Marine Fisheries Service, Southwest Region Sustainable Fisheries Division

Activity: Authorization of Pelagic Fisheries under the Fishery Management Plan for the Pelagic Fisheries of the Western Pacific Region.

Consulting Agency: National Marine Fisheries Service, Endangered Species Division

Approved By: _____

Date issued: _____

Abstract. To comply with the requirements of the Endangered Species Act of 1973, the National Marine Fisheries Service (NMFS) has prepared a biological opinion on its proposal to continue prosecuting various fisheries (as they existed prior to December 27, 1999) that are managed under the Pelagics Fishery Management Plan. The biological opinion considers the effects of longline, troll, handline, and pole-and-line fisheries based in Hawai'i, Samoa, Guam, and the Northern Mariana Islands on threatened and endangered species and critical habitat.

Based on previous patterns of interactions between the fisheries and endangered marine mammals, the Opinion concludes that the proposed fisheries are not likely to adversely affect these marine mammals or critical habitat that has been designated for them (blue whale, *Balaenoptera musculus*; fin whale, *Balaenoptera physalus*; Hawaiian monk seal, *Monachus schauinslandi*, humpback whale, *Megaptera novaeangliae*; right whale, *Eubalaena glacialis*; sei whale, *Balaenoptera borealis*; and sperm whale, *Physeter macrocephalus*).

Based on previous patterns of interactions between the fisheries and threatened and endangered sea turtles, the Opinion concludes that the proposed fisheries are not likely to adversely affect hawksbill turtles (*Eretmochelys imbricata*), but are likely to adversely affect green turtles (*Chelonia mydas*), leatherback turtles (*Dermochelys coriacea*), loggerhead turtles (*Caretta caretta*), and olive ridley turtles (*Lepidochelys olivacea*). NMFS has based this conclusion on previous patterns of turtles that have been captured, injured, or killed through interactions with the gear used in the fisheries.

Only limited, quantitative information on all of the turtle species was available for NMFS' analyses. To conduct its jeopardy analyses in the absence of definitive, quantitative information, NMFS used a conceptual model that considered the information available on the numbers of sea turtles captured, injured, or killed in the U.S. Pacific pelagic fisheries to determine if these injuries or deaths could be expected to reduce a species' reproduction, numbers, or distribution. As part of these analyses, NMFS made assumptions about the number of adult, female sea turtles that might be captured, injured, or killed in the pelagic fisheries. NMFS also projected the effects of the proposed fisheries on the turtles' survival and fecundity over the time it would take the 2001 cohort of hatchlings to recruit into the adult, breeding population. NMFS then considered the probable effects on turtle mortalities in the fisheries on the species'

population structure, the status and trends of the various populations, the vital rates, and the relationship between vital rates and the population's status and trend (that is, the population's rates of increase). Specifically, NMFS considered whether mortalities associated with the fisheries are a significant or chronic source of (a) reduced fecundity in the breeding population of these turtles or (b) decreased rates of survival in one or more life history stage of these sea turtles.

Based on these qualitative analyses, NMFS concluded that the numbers of green, leatherback, and loggerhead turtles captured, injured, or killed in the proposed fisheries would reduce the numbers and reproduction of those species in a way that would be expected to appreciably reduce their likelihood of surviving and recovering in the wild. NMFS concluded that the numbers of olive ridley turtles captured, injured, or killed in the proposed fisheries would not reduce the numbers and reproduction of that species in a way that reduced its likelihood of surviving and recovering in the wild. The Opinion outlines reasonable and prudent alternatives that are expected to avoid the likelihood of jeopardizing green, leatherback, and loggerhead turtles. The Opinion also provides an Incidental Take Statement that includes measures to minimize the impact of residual captures and deaths on all four sea turtles.

Table of Contents

	Page
Consultation History	3
Description of the Proposed Action	4
Pelagic Fisheries of Hawaii	6
Pelagic Fisheries of American Samoa	23
Pelagic Fisheries of Guam	27
Pelagic Fisheries of the Northern Mariana Islands	28
Description of the Action Area	30
Status of the Species and Environmental Baseline	36
Effects of the Action	77
Cumulative Effects	112
Species' Response to the Proposed Action	113
Conclusion	128
Reasonable and Prudent Alternative	129
Incidental Take Statement	138
Conservation Recommendations	143
Literature Cited	145
Appendices	following page 162
Figures follow Appendices	

Introduction

Section 7(a)(2) of the Endangered Species Act (ESA) (16 U.S.C. § 1531 et seq.) requires that each federal agency shall ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat of such species. When the action of a federal agency may affect a protected species, that agency is required to consult with either the National Marine Fisheries Service (NMFS) or the U.S. Fish and Wildlife Service, depending upon the protected species that may be affected. For the actions described in this document, the action agency is the Southwest Region Sustainable Fisheries Division of NMFS. The consulting agency is the Endangered Species Division, also of NMFS.

This document represents the NMFS' biological opinion (Opinion) based on our review of the Fishery Management Plan for the Pelagic Fisheries of the Western Pacific Region (Pelagics FMP) and the effects of this action on humpback whales (*Megaptera novaeangliae*), sperm whales (*Physeter macrocephalus*), Hawaiian monk seals (*Monachus schauinslandi*), fin whales (*Balaenoptera physalus*), sei whales (*B. borealis*), right whales (*Eubalaena glacialis*), green turtles (*Chelonia mydas*), leatherback turtles (*Dermochelys coriacea*), loggerhead turtles (*Caretta caretta*), and olive ridley turtles (*Lepidochelys olivacea*), in accordance with section 7 of the ESA.

This Opinion is based on information provided in the December 4, 2000 Draft Environmental Impact Statement (DEIS) for the Pelagics FMP, the July 1986 Pelagics FMP and subsequent amendments, recovery plans for the humpback whale and Hawaiian monk seal, the most current marine mammal stock assessment reports, sea turtle recovery plans, past and current research, and biological opinions for this and other relevant fisheries. A complete administrative record of this consultation is on file at the NMFS, Southwest Regional Office, Long Beach, California.

I. CONSULTATION HISTORY

A complete consultation history for previous consultations under the Pelagics FMP can be found in the November 3, 1998, biological opinion on the reinitiated consultation for the Pelagics FMP Hawaii North Central Pacific Longline Fishery (NMFS, 1998a). That opinion found that the proposed action was not likely to jeopardize the continued existence of listed sea turtles or Hawaiian monk seals, and established anticipated incidental take levels for sea turtles captured by the Hawaii-based longline fishery. The opinion also required continuation of the observer program for the fishery and required handling procedures for incidentally captured sea turtles and review of the circumstances surrounding the observed capture of any leatherback turtle.

In a May 18, 2000, memo to the Director of the NMFS Pacific Islands Area Office (PIAO), the Southwest Fisheries Science Center (SWFSC), which is responsible for calculating the estimates on incidental take occurring in the Hawaii-based longline fishery, indicated that the Hawaii-based longline fishery had likely exceeded anticipated incidental take levels for olive ridley turtles (NMFS, 2000b). On June 7, 2000, the Southwest Region reinitiated consultation (NMFS 2000c).

Given the preliminary incidental take estimates prepared by the SWFSC, later finalized in an August, 2000, report (McCracken, 2000), and new information about the status of leatherback and loggerhead turtles in the Pacific Ocean (NMFS, 2000d), NMFS decided to re-analyze the expected effects of the Hawaii-based longline fishery on all affected listed species. NMFS also determined that a comprehensive assessment of all fisheries under the Pelagics FMP was warranted. Previous consultations had focused solely on one fishery under the FMP or on single amendments to the FMP.

Also, over the past year, the Hawaii-based longline fishery has been the subject of several court-orders and is currently operating under a restricted fishing regime prescribed by the court to protect listed sea turtles. For the purposes of this consultation, the proposed action is the No Action alternative in the DEIS prepared for the Pelagics FMP, which is the Pelagics FMP and authorized fisheries as they existed prior to December 27, 1999 – the date of the first court-ordered change. The intent of this analysis is to provide, in a single document, a comprehensive assessment of the individual and cumulative effects of fisheries under the management of the Pelagics FMP.